

## REMARKS

This response is filed and deemed fully responsive to the October 16, 2003 office action. Claims 21-34 stand pending in this application. Claim 21 is amended to narrow the claims to "wireless" to more clearly denote that this claim 21 is used in real-time competitions involving multiple competitors, such as shown in Applicants' figure 2A. No new matter is added. The amendment of claim 21 also clearly distinguishes from Root.

### Claim Rejections under 35 USC § 102(e)

Claims 21 and 26-28 stand rejected under 35 USC § 102(e) as being anticipated by U.S. Patent No. 6,013,007 ("Root"). Applicants respectfully disagree. To anticipate a claim, the reference must teach every element of the claim and "the identical invention must be shown in as complete detail as contained in the ... claim." *MPEP 2131* citing *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

Root does not teach every element of claims 21, 26-28. Amended claim 21 requires the following elements:

- (A) a base station for displaying at least one performance metric;
- (B) one or more mobile sensing units for attachment with participants in a competitive event and for transmitting wireless data representing at least one performance metric; and
- (C) at least one relay unit for receiving the wireless data representing at least one performance metric from the sensing units and for wirelessly transmitting said received data to the base station.

The Examiner, on the other hand, asserts that each of these elements is disclosed. We will now dissect each of the Examiner's references to Root and show that Root does not teach these elements. First, the Examiner refers to Root in the abstract and col. 4, lines 4-26 and 49-59 to show that Root teaches element (A). This is not however true. The abstract merely discloses a "monitor" that provides real-time feedback to a user via "headphones" or via a non-wireless

connection to the monitor (e.g., by way of a computer coupled to the monitor). There is no "base station" taught within Root. In col. 4, once again a base station is not taught. Rather, these sections of col. 4 only refer to a GPS-based monitor and (in lines 49-59) serial connection (wireless connection is not disclosed) to the monitor.

For example, consider Applicants' figure 2A, which shows a base station and relay units – which cooperate to collect and transmit wireless data from a series of mobile sensing units to the base station – all in real time for a sporting event. Clearly, Root does not disclose structure as in FIG. 2A (and claimed in claim 21).

Next the Examiner points to col. 5, lines 35-50, and col. 8, lines 66 – col. 9, line 9 as if this section teaches multiple mobile sensing units in a competitive event. Col. 5, lines 35-50 of Root only discusses figure 6, which does not, at all, teach multiple competitors in an event setting. Col. 8-col. 9 discuss an Internet site that could be used to show virtual (not real time) competitions. This is not, though, synonymous with real competition in an event as taught by Applicants in claim 21. Note, in particular (and once again) that "relay units" are not disclosed, particularly relay by wireless data between multiple sensing units and the base station. The reason for this is that Root does not teach real-time competition, as enabled by Applicants' invention of claim 21.

Finally, the Examiner points to col. 3, lines 8-11, col. 6, lines 12-16, col. 9, lines 5-9, col. 2, lines 3-13 and col. 2, lines 30-40 to argue that Root discloses at least one relay unit as in element (C). However, col. 3, lines 8-11 discloses a modem only. There is no teaching of wirelessly communicating data between multiple sensing units and a base station by relays (e.g., such as shown in figure 2A of Applicants' specification).

Claims 26-28 depend from claim 21 and benefit from like arguments – though these claims also have other features that patentably distinguish over Root. For example, Root does not, in fact, teach displaying data on a scoreboard (claim 26). The Examiner refers to col. 4, lines 4-14 of Root; however this section only teaches displaying device options on the display of the

GPS monitor!! This is not a scoreboard that is separate from the base station, as in claim 26. A similar argument is provided with claim 27. Reconsideration is requested for claims 26-28.

### Claim Rejections - 35 USC § 103

Claim 22 stands rejected under 35 USC § 103(a) as being unpatentable over Root in view of U.S. Patent No. 5,420,828 ("Helmsderfer") and U.S. Patent No. 5,420,828 ("Geiger"). Applicants respectfully disagree, and further believe that Root, Helmsderfer and Geiger do not render claim 22 *prima facie* obvious, as explained below.

The following is a quotation from the MPEP setting forth the three basic criteria that must be met to establish a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

MPEP, §2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

We already argued that Root does not teach the elements of amended claim 21. Helmsderfer and Geiger are cited for purposes of the "camera", while Geiger is cited for purposes of sending data. Nonetheless, among other reasons, Root, Helmsderfer and Geiger do not, at all, teach or suggest a relay unit as claimed, including the relay of wireless data between multiple sensing units and the base station. Therefore, this rejection fails 35 U.S.C. §103 in that not all elements are taught. The references are also non-analogous art, and cannot be reasonably combined to render claim 22. We disagree it would be obvious to a skilled artisan to modify

Root, Helmsderfer and Geiger to render claim 21. We specifically request evidence of how this may be done pursuant to MPEP 2144. We believe this assertion relies on hindsight.

Claim 23-24 stand rejected under 35 USC § 103(a) as being unpatentable over Root in view of U.S. Patent No. 5,396,429 (“Hanchett”). Applicants respectfully disagree, and further believe that Root and Hanchett do not render claims any of claims 23-24 *prima facie* obvious, as explained below.

We already argued that Root does not teach the elements of amended claim 21 – that claim 21 itself requires a relay unit – to transmit wireless data from sensing units to a base station - and that Root fails to teach or suggest these elements. Hanchett also does not teach or suggest features of claims 22-23 in the context of claim 21. Hanchett is also non-analogous art to Root. We disagree it would be obvious to a skilled artisan to modify Root and Hanchett to render claims 22-23. Once again, we specifically request evidence of how this may be done pursuant to MPEP 2144.

Claim 29-34 stand rejected under 35 USC § 103(a) as being unpatentable over Root in view of U.S. Patent No. 6,163,021 (“Michelson”). Applicants respectfully disagree, and further believe that Root and Hanchett do not render claims any of claims 29-34 *prima facie* obvious, as explained below.

We already argued that Root does not teach the elements of amended claim 21 – that claim 21 itself requires a relay unit to relay wireless data from multiple sensing units to a base station and that Root fails to teach or suggest these element. Root in combination with Michelson also does not teach or suggest features of claim 21. Michelson is also non-analogous art to Root. We disagree it would be obvious to a skilled artisan to modify Root and Hanchett to render claims 29-34, and specifically request evidence of how this may be done pursuant to MPEP 2144. Root and Michelson simply do not teach the elements of claims 29-34, each of which depends from claim 21. Moreover, the Examiner cites Michelson seemingly because it teaches a navigation system for spinning projectiles; however we ask that the Examiner again review claims 29-34 and then Michelson because Applicants' claims 21, 29-34 are simply not shown by

Root and/or Michelson. Michelson teaches a magnetic spin sensor; however nothing in Michelson teaches the elements of claims 21 and 29-34. More particularly, Michelson concerns a navigation system for spinning projectiles; it is not analogous art and also fails to recite the key elements of claim 21: performance metric, relay units, mobile sensing units, etc. Reconsideration and allowance is requested for each of claims 29-34.

Claim 25 stands rejected under 35 USC § 103(a) as being unpatentable over Root in view of Hanchett and U.S. Patent No. 5,993,335 ("Eden"). Applicants respectfully disagree, and further believe that Root, Hanchett and Eden do not render claim 25 *prima facie* obvious, as explained below.

We already argued that Root and Hanchett do not teach the elements of amended claim 21. Eden is cited for purposes of the "half pipe". Nonetheless, among other reasons, Root, Hanchett and Eden do not, at all, teach or suggest a relay unit and the transmission of wireless data as in claim 21. Eden does not teach any electronics; it instead teaches a type of hockey arena. It is non-analogous art to Root and Hanchett. Therefore, this rejection fails 35 U.S.C. §103 in that not all elements are taught. The references are also non-analogous art, and cannot be reasonably combined to render claim 25. We disagree it would be obvious to a skilled artisan to modify Root, Hanchett and Eden to render claim 25, and specifically request evidence of how this may be done pursuant to MPEP 2144.

Note that the omission of an element – e.g., mobile sensing units, relay unit, performance data, wireless transmission of data – is an indicia of non-obviousness. *See MPEP 2144.04.* Neither is it "obvious to one of ordinary skill" to modify these references unless there is a suggestion to do so; none of the references provide motivation to combine, particularly with regard to non-analogous art cited by the Examiner. In several of the above arguments, Applicants specifically request evidence in the prior art to render claim 21; we contend this cannot be done without hindsight. Reconsideration and allowance of all claims 21-34 are requested.

For the reasons discussed above, Applicants believe that amended claims 21-34 are non-obvious in view of the cited references; their reconsideration and allowance are requested.

Serial No. 09/607,678

Amendment and Remarks responsive to

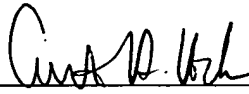
Office Action mailed October 16, 2003

Page 8

The Petition and \$55 fee for a One-month Extension of Time is included herewith. Due to the Presidents' Day holiday, the attached Petition and fee serve to extend the period for reply to and including February 17, 2004. Per 37 CFR §1.7, *"When the day, or the last day fixed by statute or by or under this part for taking any action or paying any fee in the United States Patent and Trademark Office falls on Saturday, Sunday, or on a Federal holiday within the District of Columbia, the action may be taken, or the fee paid, on the next succeeding business day which is not a Saturday, Sunday, or a Federal holiday."* It is believed no additional fee is due. If any additional fee is due, please charge Deposit Account No. 12-0600.

Respectfully submitted,

Date: 2/17/04

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